Are crashes catching?

Exchange-rate crises, once started, tend to spread. For good reasons

ECONOMICS FOCUS

"WHEN Mexico sneezes, Argentina catches a cold." This currency-traders' cliché may be lacking in originality but the infection metaphor seems apt, at least. Currency crises do appear to spread across borders with alarming ease. Consider the panic that followed the collapse of Mexico's peso at the end of 1994: it rattled other emerging markets from Brazil to Thailand. Or recall 1992, when the devaluation of sterling and the lira were followed by "speculative attacks" on the Irish punt and French franc.

Why is turbulence in the currency markets infectious? And what decides whether any given currency is likely to succumb? These are not idle questions. Supporters of the $40 billion bail-out plan for Mexico argued that, without it, the peso crisis would spread indiscriminately throughout the emerging economies, owing to the so-called "contagion effect". Others argued that the bail-out was unnecessary. They claimed that currency crises do not spread randomly: only countries with weak economies and/or bad policies are likely to suffer. The contagion lobbyists prevailed, but were they right?

In principle, a currency crisis might spread in several ways. Trade is one possible channel. When one country is forced to devalue its currency, its exporters gain a temporary edge over their rivals. Conversely, other countries' exporters are worse off. Conceivably, this alone might prompt an attack on those countries' currencies. Britain's importance to Ireland as an export market could, for instance, explain the attack on the Irish punt after the pound was devalued.

Possibly, macroeconomic similarities are to blame. Once one country has suffered a currency upset, investors tend to worry about others in similar circumstances. After the Mexican peso collapsed, emerging economies with large overseas current-account deficits, such as Hungary or Thailand, suddenly seemed vulnerable. Nothing had changed except the expectations of investors—but that was enough. When statistics are sketchy and investors inexperienced, the effect may be all the stronger.

Another possibility is that "good practice" in the financial markets inadvertently spreads the illness. Many of the institutional investors that dominate today's emerging markets need to keep much of their portfolio in cash or other liquid assets in case savers want to draw down their investments. Losing heavily in any particular country might force them to sell assets elsewhere merely to maintain the necessary liquidity.

Measuring which of these effects matters most has become a popular new area of economic research. So far the number-crunchers have adopted two main approaches. The first is to analyse a single crisis, such as last year's emerging-market jitters, very carefully. A recent paper by Jeffrey Sachs and Aaron Tornell of Harvard University and Andres Velasco of New York University does this*. It tracks 20 emerging economies between November 1994 and July 1995 and tries to gauge what, if any, speculative pressure currencies suffered during the height of Mexico's troubles.

To measure this pressure, the authors calculated a "crisis index" based on the extent of losses from the country's foreign-exchange reserves and the fall in its currency. Then they tried to identify the factors that caused the pressure, thus defined, to rise. Three things appeared to explain around 70% of the increase in the crisis index: an earlier appreciation of the real exchange rate; booming bank lending between 1990 and 1994; and low foreign-exchange reserves relative to the overall stock of money.

Thus, they concluded, the emerging-market contagion of 1995 had mainly "rational" causes. Countries with overvalued exchange rates, weak banking systems and low reserves were more likely to suffer speculative attacks. Interestingly, other economic factors, such as the size of a country's current-account deficit or the amount of its previous capital inflows, did not seem to matter.

Generalising from such an analysis is dangerous. The sample of countries is not random and the study covers only a short period. Barry Eichengreen and Andrew Rose of Berkeley and Charles Wyplosz from the University of Geneva adopted a more comprehensive approach**. They tracked 20 industrial countries from 1959 to 1993, and tried to measure whether the chance of a country's having a currency crisis is higher merely because some other country is facing one.

Beggar thy neighbour

Their study concentrated on countries with good statistics, so a better index of speculative pressure could be devised: it included shifts in interest rates as well as changes in exchange rates and reserves. The results were striking. Between 1959 and 1993, a currency crisis in one country raised the odds that such a crisis would happen elsewhere by eight percentage points, even after differences in policies had been taken into account.

The study then went on to see how these crises were transmitted. It asked whether close trading ties affect a currency's vulnerability to a crisis elsewhere. It also examined the part played by similarities in macroeconomic policy. Surprisingly, trade seemed to play the more important role.

However, this approach has problems too. The study covers only the industrialised countries, so it explains little about emerging economies: perhaps currency crises there spread for different reasons. Moreover, the structure of financial markets may have changed so much over the past decades that evidence from the 1960s and 1970s may no longer be relevant.

Economists plainly have a long way to go in understanding exactly why currency crises spread. But the results from work so far at least suggest that "rational" causes predominate. Contrary to much commentary, contagion does not seem to be a matter of mass hysteria in the markets. Governments, it seems, should be less surprised when the speculators strike.

* "Financial Crises in Emerging Markets: the Lessons from 1995." By Jeffrey Sachs, Aaron Tornell and Andres Velasco. NBER Working Paper No 5576. May 1996.
** "Contagious Currency Crises." By Barry Eichengreen, Andrew Rose and Charles Wyplosz. NBER Working Paper No 5681. July 1996.